

Weekly Report

May15-27

S2 Week 13 (4/6/15 – 4/12/15)

Advisors: Dr. Jones, Dr. Elia

Team Members:

Alberto Di Martino * Team Co-Web *
Dylan Gransee * Webmaster *
Robert Larsen * Team Leader *
Ian McInerney * Team Key Concept Holder *
Aaron Pederson * Team Communications *
Rohit Zambre * Team Secretary *
Fengxing Zhu * Team Comm. Co-leader *

Weekly Summary

We have a new body on Eris and PWMs output over a different set of pins. This should make driving the robot via the old method possible, but this needs to be investigated more.

Pending Issues:

- The pendulum would randomly get a large spike in the data from VRPN
 - We think it was fixed by re-zeroing on the camera system, but we want to make sure it isn't another issue
- The lack of available of device descriptors
 - Preventing us from controlling more than four motors at the moment

Individual Contributions:

Aaron:

- Picked up and assembled Eris body
- Updated GUI to use markers and plot them

Alberto:

- Got and assembled Eris Body

Dylan:

- Restructuring code
- Worked on writing the demo step response for the pendulum (square pattern)
 - Not yet tested
- Assisted with Eris body assembly and testing (testing went very well)

Fengxing:

- Worked on documentation of 2-D derivation

Ian:

- Acquired extender cables for Eris motors
- Assisted with assembly of new Eris base
- Electrically modified the ESC for the Gimbal Motor

Robert:

- Got VHDL modified to work like the original mysterious bit file
- Added PWMC signals, so control of wheels + quad is theoretically possible

Rohit:

- Looked at the VHDL file
- Worked on documentation for the Data Analysis Tool. Still working
- Worked on marker-parsing and logging for the command-line interface of the Tool

Next week goals:

Aaron:

-

Alberto:

-

Dylan:

- Finish the step response demo for this weekend
- Work on poster
- Attempt to get Eris to drive

Fengxing:

-

Ian:

- Test gimbal ESC with the gimbal motor
- Play with anti-windup some more

Robert:

-

Rohit

- Keep working on documentation for the Data Analysis Tool

Work Hour Totals:

Team Member	Weekly Hours	Running Total
Aaron	0.00	187.80
Alberto	0.00	166.50
Dylan	4.00	231.00
Fengxing	3.50	163.00
Ian	6.50	200.00
Robert	7.00	196.00
Rohit	8.50	170.00